



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,006	01/18/2006	Yasuyo Sogawa	28951.1169	7173
53067 7590 03/31/2008 STEP TOE & JOHNSON LLP 1330 CONNECTICUT AVE., NW WASHINGTON, DC 20036				
EXAMINER				
CRAWFORD, LATANYA N				
ART UNIT		PAPER NUMBER		
2813				
MAIL DATE		DELIVERY MODE		
03/31/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/565,006

Applicant(s)

SOGAWA ET AL

Examiner

LATANYA CRAWFORD

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. This office action is in response to the correspondence filed on 2/26/2008.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claim 1** is rejected under 35 U.S.C. 102(b) as being anticipated by **Yamaguchi (US Pub no. 2003/0071331 A1)**.

Regarding claim 1, Yamaguchi et al. discloses pads **5** on a surface of a semiconductor substrate (**fig. 12**), and a plurality of wirings **3/4** electrically connected to the pads **5** (**fig. 12**), wherein said wirings **3/4** are located for contacting bumps, **contact terminal**, on a probe card (**fig. 8**), when such a card is located parallel to said surface of the semiconductor substrate and contiguous to said wirings **3/4**, but spaced from said pads **5** (**fig. 8 & 12**).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 2 & 3** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yamaguchi (US Pub no. 2003/0071331 A1)** in view of **Sakai (US Patent 6,249,114 B1)**.

Regarding claim 2, Yamaguchi et al. discloses all the claim limitations of claim 1 but fails to teach comprising at least two of said wirings; both of which physically contact one of said bumps, without touching each other.

However, Sakai et al. teaches at least two of said wirings **11a/12a/13a-11d/12d/13d**; both of which physically contact one of said bumps **14**, without touching each other (**Fig. 1; column 3, lines 4-27 & 55-59**). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the semiconductor integrated circuit of Yamaguchi et al. with at least two of said wirings; both of which physically contact one of said bumps, without touching each other taught by Sakai et al. since doing so would provide testing of a plurality of wirings.

Regarding claim 3, Sakai et al. teaches wherein each of said wirings **11a/12a/13a-11d/12d/13d** has at least one bent portion or angular portion for directly contacting one or more bumps (**fig. 1**).

6. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Yamaguchi (US Pub no. 2003/0071331 A1)** in view of **Sakai (US Patent 6,249,114 B1)** as applied to claim 2, and further in view of **Hagiwara (US Patent 6,365,443 B1)**.

Regarding claim 4, Yamaguchi et al. as modified by Sakai et al. discloses all the claim limitations of claim 2 but fails to teach said wirings have electrically separable portions for electrically disconnecting said wirings from said pads.

However, Hagiwara et al. teaches said wirings have electrically separable portions for electrically disconnecting said wirings from said pads (**column 4, lines 5-10**). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the semiconductor integrated circuit of Yamaguchi et al. & Sakai et al. with said wirings have electrically separable portions for electrically disconnecting said wirings from said pads taught by Hagiwara et al. since doing so would disrupt electrical signals to the integrated circuit.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LATANYA CRAWFORD whose telephone number is (571)270-3208. The examiner can normally be reached on Monday-Friday 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2813

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carl Whitehead Jr./
Supervisory Patent Examiner, Art Unit 2813

/LaTanya Crawford/
Examiner, Art Unit 2813